

Sampling of Omega 3 Research

On the next two pages you'll find an abbreviated list of available omega-3 research. In addition to each study listed, there are many others available. Just go to www.pubmed.com, type in the condition you're researching along with omega-3, and you'll bring up a list of numerous research documents. Omega-3s are among the most widely researched and proven supplements we have. That's why doctors can actually prescribe an omega-3 supplement. The American Heart Association recommends that everyone should be taking their omega-3s daily. We strongly agree. That's why we offer the best

omega-3 supplement available—K48-PLUS. Here Richardson AJ, Puri BK. Omega-3 fatty acids in disorders. *Intern Rev of Psychiatry*, 2006 CE, et al. The effects of dietary supplementation *J Allergy Clin Immunol* 1988;81:183.

3). **Anti-Inflammatory** – Maroon JC, Bost inflammatory: an alternative to nonsteroidal *Surg Neurology*, 2006 Apr; 65(4):326-31. for cognition, behavior, and mood: clinical cell membrane phospholipids. University of Sep; 12(3):207-27. **Arrhythmia** - Nair SSD,

by dietary (n-3) polyunsaturated fatty acids and 93. **Atherosclerosis** - Von Schacky C, omega-3 fatty acids on coronary atherosclerosis. trial. *Ann Intern Med* 1999;130:554-62. and Irish Nutrition and Dietetic Institute disease' PUFA, inflammatory processes and No; 67(4):409-18. **Asthma** - Broughton KS,

with n-3 fatty acid ingestion are related to 5-1997;65:1011-7. **Autism/Asperger's**

Abnormal fatty acid metabolism in autism and Asperger's syndrome. In: *Phospholipid Spectrum Disorder in Psychiatry and Neurology* (2nd edition) "in press". **Blood Pressure** - Blood pressure response to fish oil supplementation: metaregression analysis of randomized trials. *J of Hypertension*, 2002, Vol 20, Iss 8, pp 1493-1499. JM Geleijnse, EJ Giltay, et al, Univ Wageningen & Res Ctr, Div Human Nutr & Epidemiol, POB 8129, NL-6700 EV Wageningen, Netherlands. **Bipolar** - Stoll AL, Severus WE, et al. Omega 3 fatty acids in bipolar disorder. A preliminary double-blind, placebo-controlled trial. *Arch Gen Psychiatr* 1999;56:407-12.

Bone Metabolism and bone/joint diseases – Watkins BA, Lik Y, et al. Omega-3 polyunsaturated fatty acids and skeletal health. *Exper Biol & Medi (Maywood)*. 2001 jun;226(6):485-97. **Bowel diseases** – Calder PC. Polyunsaturated fatty acids, inflammatory processes and inflammatory bowel diseases. *Molecular Nutr Food Res*, 2008 Aug; 52(8):885-97. PC Calder, Inst of Human Nutr, Univ of Southampton. **Brain Development** – Simopoulos AP, Summary of the NATO Advanced Research Workshop on Dietary Omega 3 and 6 Fatty Acids: Biological Effects and Nutritional Essentiality, *Div of Nutr Sci, Internl Life Sciences Inst Res Foundn, Wash, D.C. 20036*. **Cancers: breast, colon and prostate** - Zhu ZR, Mannisto JAS, et al. Fatty acid composition of breast adipose tissue in breast cancer patients and patients with benign breast disease. *Nutr Cancer* 1995;24:151-60. **Cardiovascular Disease** – Simopoulos AP. The importance of the omega-6/omega-3 fatty acid ratio in cardiovascular disease and other chronic diseases. , The Cntr for Genetcs, Nutr & Hlth, Wash, DC. *Wrld Rev of Nutr & Dietetics* 2009;99:VII-XI.

High Cholesterol – Bunea R, Farrah EL, Deutsch L. Assessing the effects of krill oil on blood lipids, specifically total cholesterol, triglycerides, LDL and HDL. *Altrn Med Rev* 2004;9(4):420-428). **Chronic Fatigue Syndrome** - Puri BK. The use of eicosapentaenoic acid in the treatment of chronic fatigue syndrome. *Prostaglandins Leukot Essent Fatty Acids* 2004;70:399-401. **Chronic obstructive pulmonary disease (COPD)** - Shahar E, Folsom AR, Melnick SL, et al. Dietary n-3 polyunsaturated fatty acids and smoking-related chronic obstructive pulmonary disease. Atherosclerosis Risk in Communities Study Investigators. *N Engl J Med* 1994;331:228-33. **Collagen production for skin and tissue** – Jia Y, Turek JJ. Polyenoic fatty acid ratios alter fibroblast collagen production via PGE2 and PGE receptor subtype response. *Exp Biology & Medicine (Maywood)*. 2004 Jul;229(7):676-83. **Crohn's disease** - Mate J, Castanos R, et al. Does dietary fish oil maintain the remission of Crohn's disease: a case control study. *Gastroenterology* 1991;100:A228 [abstract]. **Cystic fibrosis** - Lawrence R, Sorrell T. Eicosapentaenoic acid in cystic fibrosis: evidence of a pathogenic role for leukotriene B4. *Lancet* 1993;342:465-9. **Depression** – Hibbein, JR. Depression, suicide and deficiencies of omega-3 essential fatty acids in modern diets. *Wrld Rev of Nutr & Dietet,*



is a sampling of the research: **ADD, ADHD** - ADHD and related neurodevelopmental Apr;1892):155-72. **Allergies** - Arm JP, Horton with fish oil on asthmatic responses to antigen. **Alzheimer's** - *British Med J* (2002;325:932-933).

Omega-3 fatty acids (fish oil) as an anti-inflammatory drugs for discogenic pain. **Anxiety** - Kidd PM. Omega-3 DHA and EPA findings and structural-functional synergies with California, Berkeley, CA. *Altern Med Rev* 2007

Leitch JW, et al. Prevention of cardiac arrhythmia their mechanism of action. *J Nutr* 1997;127:383-388. Angerer P, Kothny W, et al. The effect of dietary A randomized, double-blind, placebo-controlled

Arthritis - Session 3: Joint Nutrition Society Symposium on 'Nutrition and autoimmune rheumatoid arthritis. *The Proc Nutr Soc* 2008 Johnson CS, et al. Reduced asthma symptoms series leukotriene production. *Am J Clin Nutr* 2002;74:1011-7. **Syndrome** - Bell, J.G., Dick, J.R., et al. (2002)

2009;99:17-30. Epub 2009 Jan 9. JR Hibbein. **Diabetes** - Malasanos TH, Stacpoole PW. Biological effects of omega-3 fatty acids in diabetes mellitus. *Diabetes Care* 1991;14:1160-79. **Endometriosis** - Batchelder HJ, Hudson T, et al. Therapeutic approaches to endometriosis. *Protocol J of Botanical Med* 1996; Spring:25-60. **Eczema** - Bjornboe A, Soyland E, et al. Effect of n-3 fatty acid supplement to patients with atopic dermatitis. *J Intern Med Suppl* 1989;225:233-6. **Epilepsy** - Schlanger S, Shinitzky M, Yam D. Diet enriched with omega-3 fatty acids alleviates convulsion symptoms in epilepsy patients. *Epilepsia* 2002;43:103-104. **Glaucoma** - McGuire R. Fish oil cuts lower ocular pressure. *Med Tribune* 1991;Sept 19:25. **Heart** - Siscovick DS, Raghunathan TE, et al. Dietary intake and cell membrane levels of long-chain n-3 polyunsaturated fatty acids and the risk of primary cardiac arrest. *JAMA*. 1995;274:1363-1367. **Insulin Resistance** - Kasim SE. Dietary marine fish oils and insulin action in type 2 diabetes. *Ann N Y Acad Sci*. 1993;683:250-257. **Immune system** - Alexander JW. Immunonutrition: the role of omega-3 fatty acids. *Nutr* 1998;14:627-33. **Joint Pain**, back, neck, hips, elbow, knee etc (Kremer, *Lipids* 31 Suppl: S243-247, 1996) (Geusens, *Arthritis Rheum*. 37:824-829, 1994) (Kremer, *Arthritis Rheum*. 38:1107-1114, 1995) (Uauy-Dagach, R et al, *Nutr Review*. 54:S102-S108, 1996) (IBID Kremer, 1995). **Kidney disease** - Peck LW. Essential fatty acid deficiency in renal failure: can supplements really help? *J Am Diet Assoc* 1997;97:5150-3. **Kidney Inflammation** - Friedman AN, Moe SM, et al. Fish consumption and omega-3 fatty acid status and determinants in long-term hemodialysis. *Am J of Kidney Dis*, 2006 Jun; 47 (6):1064-71. **Lupus** - Walton AJE, Snaith ML, et al. Dietary fish oil and the severity of symptoms in patients with systemic lupus erythematosus. *Ann Rheum Dis* 1991;50:463-6. **Migraine headaches** - McCarren T, Hitzemann R, et al. Amelioration of severe migraine by fish oil (omega-3) fatty acids. *Am J Clin Nutr* 1985;41:874. **Multiple sclerosis** - Nordvik I, Myhr KM, et al. Effect of dietary advice and n-3 supplementation in newly diagnosed MS patients. *Acta Neurol Scand* 2000;102:143-9. **Osteoporosis** - Van Papendorp DH, Coetzer H, Kruger MC. Biochemical profile of osteoporotic patients on essential fatty acid supplementation. *Nutr Res* 1995;15:325-34. **Painful menstruation (dysmenorrhea)** - Harel Z, Biro FM, et al. Supplementation with omega-3 polyunsaturated fatty acids in the management of dysmenorrhea in adolescents. *Am J Obstet Gynecol* 1996;174:1335-8. **Pregnancy and postpartum support** - Olsen SF, Secher NJ, et al. Randomised clinical trials of fish oil supplementation in high risk pregnancies. Fish Oil Trials In Pregnancy (FOTIP) Team. *Brit J Obstet Gynecol* 2000;107:382-95. **Psoriasis** - Bittiner SB, Tucker WFG, et al. A double-blind, randomised, placebo-controlled trial of fish oil in psoriasis. *Lancet* 1988;i:378-80. **Raynaud's disease** - DiGiacoma RA, Kremer JM, Shah DM. Fish-oil dietary supplementation in patients with Raynaud's phenomenon: a double-blind, controlled, prospective study. *Am J Med* 1989;86:158-64. **Rheumatoid Arthritis** - Astorga A, Cubillos L, et al. Active rheumatoid arthritis: effect of dietary supplementation with omega-3 oils. A controlled double-blind trial] *Revista Medica de Chili*, 1991 Mar; 119(3):267-72. **Schizophrenia** - Fenton WS, Hibbeln J, Knable M, Essential fatty acids, lipid membrane abnormalities, and the diagnosis and treatment of Schizophrenia. *Bio Psychiatry* 2000 47:8-21. **Skin** - Ziboh VA, et al. Metabolism of polyunsaturated fatty acids by skin epidermal enzymes: generation of anti-inflammatory and antiproliferative metabolites. *Am J Clin Nutr*. 2000 Jan;71 (1Suppl):361S-6S. **Skin/Photosensitivity** - Rhodes LE, Durham BH, et al. Dietary fish oil reduces basal and ultraviolet B-generated PGE2 levels in skin and increases the threshold to provocation of polymorphic light eruption. *J Invest Dermatol* 1995;105:532-5. **Stress and Inflammation Problems** - Maes M, Christophe A, Bosmans E, et al. In humans, serum polyunsaturated fatty acid levels predict the response of proinflammatory cytokines to psychological stress. *Biol Psychiatry* 2000;47:910-20. **Ulcerative colitis** - Stenson WF, Cort D, Rodgers J, et al. Dietary supplementation with fish oil in ulcerative colitis. *Ann Intern Med* 1992;116:609-14.

Conclusions

In this document you have discovered the following benefits of K48-PLUS:

- You've learned that it is the finest and most affordable omega-3 product available
- You have learned how it is harvested, processed, and delivered so you can be confident recommending it.
- It offers exceptional value compared with the competition
- You've discovered the remarkable health benefits of Phosphatidylcholine as a natural constituent in K48-Plus
- You have access to the charts and published research abstracts confirming the effectiveness of both omega-3s in general and specifically krill oil



- 378 times greater in antioxidant value (ORAC) than Vitamins A and E
- 48 times greater antioxidant (ORAC) absorption than fish oil
- 21-64% less PMS symptoms including stress compared with fish oil
- 38.4% less pain from osteoarthritis compared with a placebo
- 39.1% less stiffness from osteoarthritis compared with a placebo
- 30.9% less signs of inflammation (lower CRP)
- 25.4% lower triglycerides
- 44.4% lower LDL cholesterol
- 6.6% lower glucose

We trust that this report has given you what you need to make a decision to make K48-PLUS part of your health care recommendations and business plan.